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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,749	11/20/2001	Heinz-Dieter Adomeit	076326-0196	9045

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EXAMINER

SMITH, JULIE KNECHT

ART UNIT	PAPER NUMBER
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3682

DATE MAILED: 01/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/988,749

Applicant(s)

ADOMEIT, HEINZ-DIETER

Examiner

Julie K Smith

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4-12, 14-15, 22-25, 27, 30-31 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by White et al. (4,616,522). White et al. discloses an apparatus for steering a motor vehicle comprising a rotatable steering device, including a shaft and a steering wheel (40), having an axis of rotation, a transmission mechanism (136), having gear teeth for translating a rotational movement of the steering device into a movement of a steering element positioned away from the axis of rotation of the steering element, and a telescopic mount (66), having a support column (106,126) fastened to a crossmember of the dashboard for supporting the steering element, wherein the mount includes a portion extending in a direction parallel to the axis of rotation of the steering element, wherein the mount is configured to cushion the impact of the occupant against the steering element (see figs 13-15). White et al. further discloses elastic means (140) for resisting the telescopic shortening of the length of the mount. Ervin does not disclose a mount that tilts downward in the even of a collision. However, White et al. teaches a telescopic mount (see fig 2) having an extending portion configured to tilt downward, and a weakened section comprising a notch (see fig. 15) to facilitate bending, wherein the mount shortens in length to further facilitate bending.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mount of Ervin with the teachings of White et al. to allow the steering device to tilt downward so as to further reduce injury to the occupant, preventing an airbag from projecting upward towards a passengers head.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al. as applied to claims 1, 4-12, 14-15, 22-25, 27, 30-31 and 34 above, and further in view of Steffens, Jr. (5,507,521).

Regarding claim 3, although White et al. does not disclose that the steering wheel tilting so that it extension a direction parallel to a longitudinal direction of the vehicle, Steffens, Jr. teaches a steering wheel device that, upon impact, is tilted downward in a direction parallel to the longitudinal direction of the vehicle.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify White et al. with the teachings of Steffens, Jr. such that the steering wheel is tilted downward, parallel to a longitudinal direction of the vehicle so as to reduce the impact of the collision imposed on the driver.

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Regarding claims 16-19, Steffens, Jr. teaches a steering apparatus further comprising a fixed subassembly (26) having a non-steering function comprising an airbag module and a horn.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mount of White et al. with the teachings of Steffens, Jr., as it is old and well known in the art to provide steering assemblies with airbags and horns for additional safety.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over White et al. as applied to claims 1, 4-12, 14-15, 22-25, 27, 30-31 and 34 above, and further in view of Mohr (4,411,167). White et al. discloses an elastic means for resisting telescopic shortening of a mount, but does not disclose that it is fluid. However, Mohr teaches a fluid resisting means (fig. 7, putty is described in col. 4) for a telescoping member (see fig. 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the resisting means of White et al. with the teachings of Mohr to provide an elastic or fluid resisting means so that the impact can further be reduced by using a spring or fluid as a dampener.

6. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al. as applied to claims 1, 4-12, 14-15, 22-25, 27, 30-31 and 34 above, and further in view of Seko (3,910,597). Although White et al. does not disclose an airbag arranged asymmetrically in relation to the axis of rotation of the steering wheel, Seko teaches an airbag that is arranged asymmetrically about the axis of rotation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of White et al. with the teachings of Seko to provide an airbag arranged asymmetrically about an axis of rotation so as to ensure that the airbag deploys properly, regardless of the tilt position of the steering wheel.

7. Claims 26, 28, 29 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al. as applied to claims 1, 4-12, 14-15, 22-25, 27, 30-31 and 34 above, and further in view of Ervin (5,070,741). White et al. discloses a steering device, as claimed, but does not disclose the transmission arrangement, as claimed. However, Ervin teaches a transmission arrangement having an endless member (38), a transmission mechanism that can be disengaged from the steering device in the event of an impact of a vehicle occupant (see fig. 4) and a housing having a predefined breaking point (43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the transmission arrangement of White et al. with the teachings of Ervin to provide a transmission arrangement that is disengaged upon impact to allow the steering column to freely move out of the way of the occupant so as to avoid injury.

8. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable White et al. as applied to claims 1, 4-12, 14-15, 22-25, 27, 30-31 and 34 above, and further in view of Cochard (4,938,094). Although White et al. is silent as to the assembly procedure of the steering assembly, Cochard teaches a pre-assembled steering transmission mechanism which can be connected to the steering element.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to design the assembly to be pre-assembled to reduce complexity and allow the assembly to be more easily installed.

Regarding claim 33, product-by-process claims are limited by and defined by the process; determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

Response to Arguments

9. Applicant's arguments, filed 10/31/03 with respect to the rejection(s) of claim(s) 1, 3-25, 27 and 29-34 under Ervin in view of White et al. have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of White et al.

Applicant's arguments regarding the rejection of claims 26 and 28 have been fully considered but they are not persuasive. A pinion is a circular gear, having no end in the radial direction, just as a belt is an endless member.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

4,655,475 to Van Gelderen

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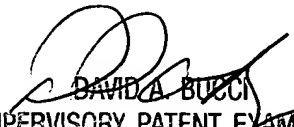
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie K Smith whose telephone number is 703-305-3948. The examiner can normally be reached on Monday-Friday, 8-5:30, (Every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Bucci can be reached on 703-308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9326.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Jks

January 8, 2004


DAVID A. BUCCI
SUPERVISORY PATENT EXAMINER
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1/12/04